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ABSTRACT

An intensive study of twenty five primary classrooms with and without aides suggested that teachers with aides displayed more evidence of job satisfaction in teaching and were able to devote more time to teaching activities they valued. Teachers with aides were able to devote more time to instruction and less time on classroom management. There was no marked evidence that teacher aides altered the teacher's ability to individualize instruction or to create greater pupil involvement. Teachers interviewed preferred spending money on a teacher aide than on classroom materials, equipment, or consultants. (Author)

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TITLE: The Effect of Teacher Aides in Primary Classrooms

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An intensive study of twenty-five primary classrooms with and without aides suggested that teachers with aides displayed more evidence of job satisfaction in teaching and were able to devote more time to teaching activities they valued. Teachers with aides were able to devote more time to instruction and less time on classroom management. There was no marked evidence that teacher aides altered the teacher's ability to individualize instruction or to create greater pupil involvement. Teachers interviewed preferred spending money on a teacher aide than on classroom materials, equipment, or consultants.

During the 1960's a variety of innovative ideas were transformed with zeal into educational realities. The theoretical notions spawned during the 1940's and 1950's were grasped by energetic reformers as a means to cure all of schooling's ills. With sincere vision and strong conviction, these reformers sought an increasing amount of governmental and foundation

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support to put these ideas into practice. But, as the winds of change have died down, the pragmatists of the 1970's stand in the dust of those earlier dreams, sifting through it for the bits and pieces that have withstood the trials of time.

Staff differentiation was one of the concepts that captured the fancy of these reformers (Allen, 1969, 1973; Caldwell, 1973; English, 1969; Fiorino, 1972). It was implemented in several model school districts throughout the country --one being Temple City, California (HEW, 1973). A visit to that district today reveals only vestiges of the grand scheme that once existed. It is possible that the pleas for models that produce a complete overhaul of a social system in one fell swoop are not manageable. It may be that the true reformers are those who see the larger vision but move forward one step at a time, making sure the practice follows the drumbeat.

One of the aspects of the full blown scheme of staff differentiation is the utilization of aides within the classroom. Teacher aides was a staffing idea that grew out of the teacher shortage during World War II and continued during the "baby boom" of the 1950's.

A comparison of the contemporary classroom with one of a century ago would sharply reveal the increasing complexity of the work of teaching (Cubberly, 1910). Today's classroom teacher needs to possess a wider range of knowledge and skills, such as the knowledge of child development and the psychological

principles of learning, ability to judge a vast array of curricular materials and evaluate a multiplicity of testing devices, and skill in operating a variety of audiovisual machines and in managing the work of others. At the same time, there is increasing pressure to individualize instruction to meet the wide range of differences among pupils within the classroom (Goodlad, 1966). Teachers are attempting to use a variety of instructional groupings, provide a wide selection of educational opportunities and promote learning achievement according to the range of ability and interest within a given group. To the novice who enters the classroom for the first time, the work of teaching appears to be overwhelming (Dreeban, 1970).

A means to assist the classroom teacher to meet the demands placed upon him, schools are employing teacher aides. The western states are employing the greatest number of these aides (Moffatt, 1972). Currently, within the State of California, there is pressure to restructure the primary grades to promote individualization of instruction for pupils (State of California, 1972). As part of this plan for providing for the unique differences of thirty pupils within a classroom, funds are provided for the hiring of teacher aides. Many other federal and state projects mandate the hiring of teacher aides to meet the requirements of their educational programs. In the City of Los Angeles, the target population of this study, about 130 aides were hired in 1966. Today district records show that approximately 9,000

aides are employed throughout the district. Utilization of such a large number of aides would suggest that their work is valued.

This study was undertaken to examine aspects of the ecological impact of placing teacher aides within the primary classroom. The intent was to describe the differences in work functions of teachers and the educational characteristics of classrooms with and without these teacher aides. This study was designed to: (1) provide useful information to policymakers on the employment of teacher aides; (2) extend knowledge of classroom observational methodology; and (3) develop and implement a model to study the work of teaching.

Goodlad has suggested that placing too much early emphasis on pupil achievement as the primary measure of the worth of an innovation may cause evaluators to miss other significant differences brought about by that change (Goodlad, 1975). Internal assessments may bring to light many other worthwhile purposes for an innovation that may be lost if only the external measure of pupil achievement is taken. Based on that reasoning, this study examined the contextual factors of the classroom rather than pupil achievement. Since the first year of an innovation is often fraught with trial and error and one may be measuring a "non-event (Charters, 1973)," it was decided to study only classrooms in which aides had been employed for more than one year.

The sample population consisted of five elementary schools, K - grade 6, located within the Greater Los Angeles area in California. Thirteen self-contained primary classrooms with teacher aides and twelve self-contained primary classrooms without teacher aides were selected. Each school in the study was composed of approximately twenty-five to thirty classrooms with twenty-six to thirty pupils assigned to each classroom. The pupils from four classrooms in each subsample were drawn from lower-middle class schools, each school composed of 40 to 50 percent Mexican-American children. Nine classrooms in the subsample of classrooms with teacher aides and eight classrooms in the subsample of classrooms with no teacher aides were drawn from schools with middle- to upper middle-class Caucasian pupils. Data gathered from the teacher interview on number of years of teaching experience, number of years at the primary level, and level of educational attainment indicated no significant differences between the two subsamples of teachers.

Records of the employment of aides in Los Angeles City and surrounding communities suggested that most classroom instructional aides were employed during the first three hours of formal instruction in the morning. Since this study was probing the effects of aides, it was decided to limit the classroom observations to the morning.

A survey of the available instruments for measuring teaching and a review of the literature revealed limited work had been done

CATEGORIES OF CENTRAL AND RELATED ACTIVITIES OF TEACHING

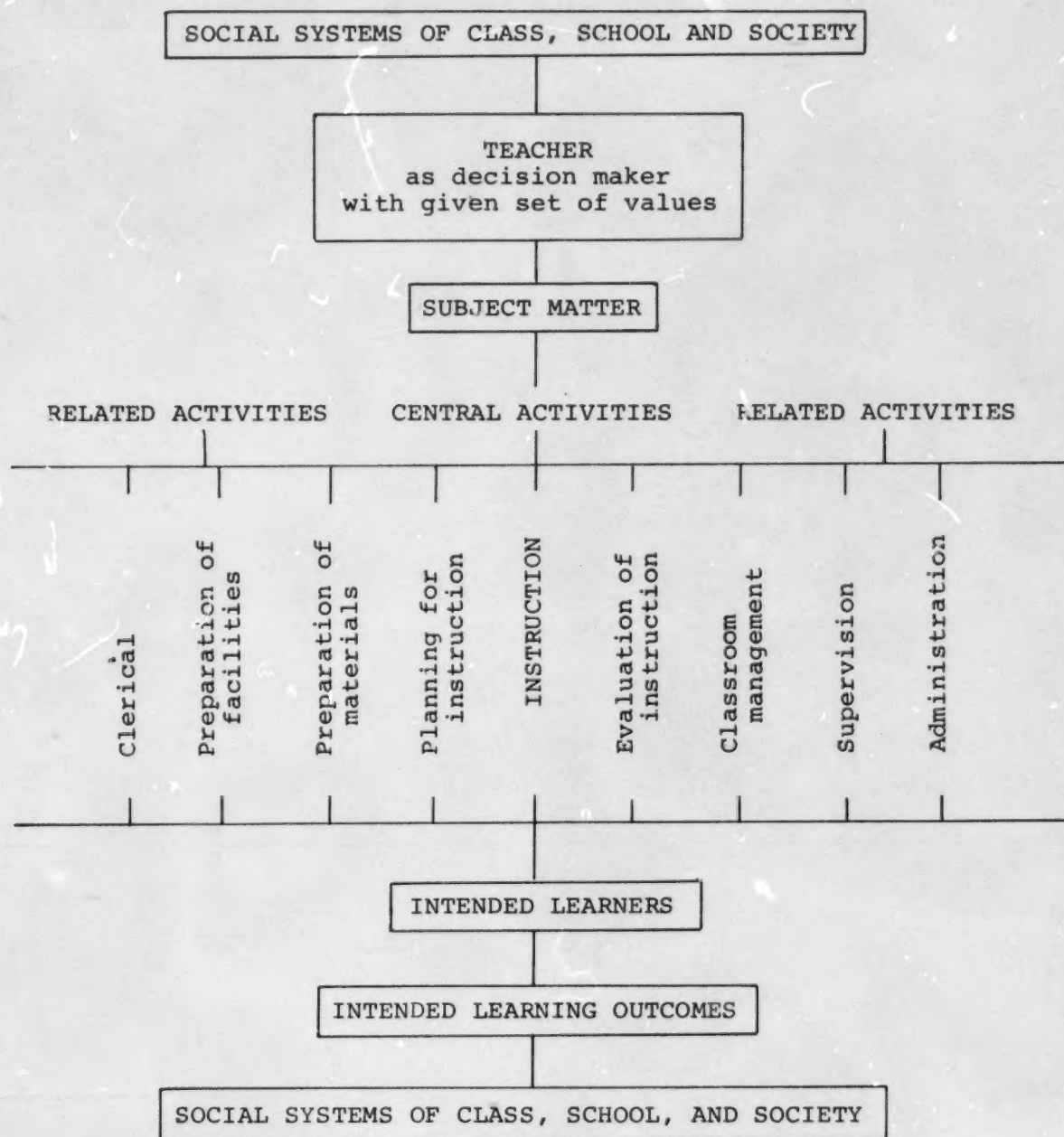


Figure 1

on the full-spectrum of teaching activities. Therefore, the model of central and related teaching activities, shown in Figure 1, was developed. This model was derived from the philosophical work of Lortie, Green and Goode (Lortie, 1969; Green, 1971; Goode, 1969), and work by organizational theorists (Blaus and Scott, 1969; Carver and Sergiovanni, 1969; Katz, 1964; Likert, 1967; Tannenbaum, 1966; and Weber, 1947). While many ideas about the nature of the work of teaching were gleaned from these scholars, the author assumes full responsibility for the particular synthesis of their ideas.

Lortie states that instruction is the central activity of teaching and Green continues the argument, adding that instruction is the form of teaching that requires the greatest degree of intellect. In his study of professions, Goode mentions that one criterion of a profession is a highly defined body of knowledge, which is acquired and sanctioned for use only by those persons seeking to enter that profession. Though education of teachers lacks such a defined body of knowledge at this time (Dreeban, 1970), the activities related to the planning of instruction, instruction, and evaluation of instruction come closest to containing those elements of teaching which might some day provide this defined body of knowledge. Therefore, in the development of this model, planning for instruction, instruction, and evaluation of instruction were situated as the central activities of teaching.

In this model, the teacher is depicted as operating within a given social system of the society, a particular school, and the classroom. The teacher is seen as an individual with a unique set of values which serve as a benchmark in the selection of alternatives for any teaching decision that must be made. During the process of instructing, the teacher must deal with some area of subject matter within some medium with the intent of producing certain learning outcomes with children. The effect of the teacher's work reaches the society through changes in the behavior of learners.

In the work of teaching, teachers do perform many other related tasks (Dreeban, 1970, 1973; Lortie, 1973; Green, 1971). This model hypothesized that these related tasks of teaching could be placed in discrete categories of clerical functions, preparation of materials, preparation of facilities, classroom management, supervision, and administration. Management theory suggested that a teacher could delegate these related teaching tasks to other individuals within the school hierarchy. A school clerk could handle record keeping; materials could be purchased "ready-made" from manufacturers; a custodian could handle the facilities; assistants could organize and control the children within the classroom; a supervisor could perform necessary monitoring functions; and the principal and central office staff could handle administrative work.

A second consideration was the appropriate unit of measurement to record difference in teacher behavior with

TABLE 1

COMPARISON OF 25 PRIMARY TEACHERS RANK ORDER
OF IDEAL AND ACTUAL USE OF CLASSROOM TIME

RANK ORDER OF CATEGORIES OF IDEAL USE OF TIME ^a	ACTUAL USE OF TIME IN MINUTES ^b	
	TEACHERS WITH AIDES	TEACHERS WITHOUT AIDES
INSTRUCTION	39.34	33.42
PLANNING FOR INSTRUCTION	18.64	20.69
EVALUATION OF INSTRUCTION	37.63	40.42
CLASSROOM MANAGEMENT ^c	29.52	40.09
SUPERVISION	15.50	14.03
CLERICAL	5.36	4.57
PREPARATION OF FACILITIES	2.94	1.83
ADMINISTRATION ^d	7.16	2.57
PREPARATION OF MATERIALS ^c	11.06	6.53
TOTAL TIME	167.15	154.15

^aRank order of teaching activities was derived from mean responses of all 25 teachers on the questionnaire "Inventory of Teaching Tasks."

^bEach teacher was observed 180 consecutive minutes for two mornings. This table depicts the mean time spent in each category per morning. Non-teaching activities account for the remainder of the time.

^cDifferences between teachers with and without aides was significant at .02 level.

^dDifferences between teachers with and without aides was significant at .01 level.

TABLE 2

FREQUENCY OF OBSERVATIONS OF TEACHERS AND AIDES
IN VARIOUS-SIZED PUPIL GROUPINGS

Group	Teachers without Aides*	Teachers with Aides	Aides
Individual ^a	5	12	18
Small, 2-6 pupils	16	17	33
Moderate, 7-12 pupils	43	37	9
Large, 13-whole class ^b	20	8	11
Whole class	37	29	13
More than whole class	2	0	0
Alone	0	0	19
TOTAL	122	103	103

* Teachers who shared the use of an aide were classified as teachers without aides during the five-minute observations when no aide was assigned to them. These teachers were classified as such for this analysis only.

^a_p < .06

^b_p < .07

and without aides. The work by Harnischfeger and Wiley made a sound argument for using time as an appropriate measure for recording quantitative differences (Harnischfeger and Wiley, 1975). But allocation of time also takes into account the values a person holds regarding what is more worthwhile. It was assumed that the way teachers allocated classroom time should reflect the values and beliefs in what is most important in teaching. Therefore, the placement of a teacher aide under the jurisdiction of a teacher should make it possible for the teacher to delegate tasks in the categories related to teaching and devote more time to the central activities of teaching.

Two trained observers visited each classroom for 180 minutes on two different days of the week to record the amount of time each teacher devoted to each category of teaching. Using a stopwatch, the observers independently recorded the work of the teacher for 180 consecutive minutes beginning with the morning "bell" or official time school began. Table 1 shows the rank order of ideal and actual use of classroom time by primary teachers with and without aides. Significant difference occurred between subsamples on classroom management, administration, and preparation of materials. The presence of aides seemed to reduce the amount of time teachers devoted to classroom management. Noting the placement of aides in classroom grouping in Table 2, one can hypothesize that the work of aides with individuals and

TABLE 3

COMPARISON OF 25 PRIMARY TEACHERS RANK ORDER
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SUPERVISION	15.50	14.03
CLERICAL	5.36	4.57
PREPARATION OF FACILITIES	2.94	1.83
ADMINISTRATION ^d	7.16	2.57
PREPARATION OF MATERIALS ^c	11.06	6.53
TOTAL TIME	167.15	164.15

^aRank order of teaching activities was derived from mean responses of all 25 teachers on the questionnaire "Inventory of teaching Tasks."

^bEach teacher was observed 180 consecutive minutes for two mornings. This table depicts the mean time spent in each category per morning. Non-teaching activities account for the remainder of the time.

^cDifferences between teachers with and without aides was significant at .02 level.

^dDifferences between teachers with and without aides was significant at .01 level.

small groups reduced the management demands made upon the teacher by some pupils. Also, the placement of teacher aides in controlling children while the teacher was working with the whole class may account for reduced time in classroom management.

Following the classroom observations, the teachers completed a 63-item questionnaire, rating how they would like to spend their morning classroom time. Each item related to one of the categories in the proposed model. This questionnaire was adapted from one developed by Charters, Jr., to study changes in teaching when differentiated staffing was implemented in Portland, Oregon. Table 3 shows the correlation on ideal and actual use of time by the teachers in both subsamples. Teachers with aides were able to devote more time to activities they valued than teachers without aides.

Each teacher also participated in a 20 - 40 minute interview. The purposes for the interview were to ascertain the teachers' general level of job satisfaction and attitudes toward the work of teaching and having teacher aides in the classroom. Table 4 depicts the significantly higher level of job satisfaction of teachers with aides. The presence of teacher aides and their assistance to teachers in the classrooms makes the work of teaching more satisfying to teachers. Teachers repeatedly reported during the interview their selection of an aide over consultants, curriculum materials or equipment for the use of a given sum of money. Aides affect the teachers

TABLE 4

COMPARISON OF THE RAW SCORES BETWEEN GROUPS ON INTERVIEW
QUESTIONS PERTAINING TO LEVEL OF JOB SATISFACTION

Level of Job Satisfaction		Primary Teachers	
		13 with Aides	12 without Aides
High	9.0	6	
Moderate	8.5		
	8.0	2	
	7.5		1
	7.0		2
	6.5	1	
	6.0	2	1
	5.5	1	
	5.0		1
	4.5	1	
	4.0		1
	3.5		
Low	3.0		
	2.5		1
	2.0		1
	1.5		
	1.0		
	0.5		1
	0.0		

sense of accomplishment and feelings of self-worth. These teachers felt that the aides were an invaluable assistance to promoting individualized instruction within the classroom.

To determine if teacher aides actually do alter the amount of individualized instruction within the classroom, two trained observers visited each classroom nine times for five-minute recordings of indicators of individualized instruction and level of pupil task involvement. The method of performing this part of the research would be easily replicable by teachers, administrators, and parents interested in studying classroom changes. The observers recorded the number of levels of difficulty of learning tasks, the frequency of the teacher and aide working with various sized groupings of children, the number of kinds of different activities that were provided children at a given moment, and the level of task involvement of children. The data analysis suggested that the presence of teacher aides did not significantly alter the teacher's ability to restructure the classroom to increase individualized instruction. Because of nominal inservice training on effective utilization of teachers' time and skills, teachers tended to persist in old patterns of behavior. With the addition of the aides, these teachers simply assigned to the aides some jobs that these teachers thought might be useful to the classroom. They did not seem to perceive the aide as an extra pair of "helping hands" to assume essential though less-skilled teaching tasks so that

the teacher could concentrate on those tasks requiring a greater amount of training and expertise.

When policymakers intend to institute a change in the work of teaching, such change should be accompanied by appropriate inservice training of the teachers. Though the State of California did suggest that staff development be a part of the budget for schools employing aides in Early Childhood Education classrooms, the guidelines did not provide for any linkage between inservice training and institutions of higher education. What staff development did occur was piecemeal and often dictated by administration and not the teachers. Without staff development on ways to effectively utilize aides as well as special training for the aides, the teachers continued to perform those activities that they felt were satisfying.

Other rapidly changing professional fields, such as medicine and nursing, provide regular opportunities for updating skills. Persons in such occupations have released time during regular work hours to attend staff training sessions. In the past, teachers have usually been expected to provide their own inservice training by attending evening courses, Saturday conferences, after-school district sessions, and reading articles in educational magazines and journals. After dealing with twenty-five to thirty children during the day, teachers have little energy left to "retread" after school. It is time that policymakers consider the updating of teaching skills

to be a regular part of the teaching job and provide both the means and the time in which to do so.

During the early part of the workday, when teachers are "fresh" and ready to acquire new skills and ideas, local school districts should periodically provide released time for inservice training sessions. The new legislation, introduced by Mondale at the federal level for the development of Outreach programs and by Hart in the State of California for the development of teacher centers whose thrust for inservice training is determined by the assessed needs of the community's teachers, should be provided funds so that their intent becomes a reality. Local inservice can offer more indepth, practical and continuous work on instructional, curricular, or organizational problems than piecemeal courses offered at outside institutions or conferences. Local inservice can be far more flexible and responsive to staff requirements.

Without appropriate inservice training, intended innovations will continue to be recorded as "non-events." Changes in work patterns do not come about overnight by simply writing proposals or altering names and labels. If society demands changes in the effectiveness of teachers, such changes need to be accompanied by significant funds so that educational programs can be developed for the training of the staff in the new skills and knowledge required by each innovation introduced. This study on the effects of aides on teacher

use of time and individualization of instruction is only one examination of the limited effects of an innovation because the participants in the change were not fully trained to adopt the needed behaviors to make the innovation successful.

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